

in-Suit”) and 8,145,998 (“the ‘998 patent”).¹ Specifically, Worlds has alleged that Activision infringes claims 1-20 of the ‘690 patent, claims 1-9 of the ‘558 patent, claim 1 of the ‘856 patent, claims 1-8, 10, 12 and 14-16 of the ‘501 patent, and claims 1-3, 7, 8 and 11-21 of the ‘998 patent (collectively, “Asserted Claims”). Pursuant to the Joint Scheduling Statement ¶ 4.B, Activision does not provide any contentions regarding any claims not asserted in Worlds’ Preliminary Infringement Disclosure. To the extent that Worlds asserts additional claims against Activision in the future, Activision reserves the right to disclose new or supplemental invalidity contentions regarding such claims.

II. PRELIMINARY INVALIDITY DISCLOSURE

A. Identification of Prior Art

Pursuant to the Joint Scheduling Statement ¶ 4.B, and based on Activision’s current understanding of Worlds’ Preliminary Infringement Disclosure, Activision identifies the following references and disclosures set forth in Table 1 as prior art that anticipates or renders obvious one or more Asserted Claims of the Original Patents-in-Suit. As set forth in the charts in Exhibits A-D and F,² the prior art listed in Table 1 demonstrates that the alleged inventions claimed in the Original Patents-in-Suit were well known and obvious as of the time of filing of the Original Patents-in-Suit.

¹ Worlds amended the Complaint on September 21, 2012 to additionally assert the ‘998 patent against Activision. In light of Worlds’ amendment, the parties agreed to extend the deadline for Activision to file its Preliminary Invalidity Disclosure with respect to the ‘998 patent until December 20, 2012. Accordingly, Activision makes this Preliminary Invalidity Disclosure only with respect to the Original Patents-in-Suit.

² Exhibit E has been intentionally omitted.

TABLE 1

Author or Inventor	Title or Patent Number of Prior Art	Date	Relevance
Durward et al.	U.S. Patent No. 5,659,691, titled Virtual Reality Network With Selective Distribution And Updating Of Data To Reduce Bandwidth Requirements, filed September 23, 1993 (“Durward patent”)	August 19, 1997 (issued)	Anticipation and obviousness
Rick Kazman	Making WAVES: On the Design of Architecture for Low-end Distributed Virtual Environments, Proceedings of IEEE Virtual Reality Annual International Symposium, Seattle, WA, September 18-22, 1993, pp. 443-49 (“Kazman Article”)	September 1993	Anticipation and obviousness
Michael Snoswell	Overview of Cyberterm, a Cyberspace Protocol Implementation (“Snoswell Article”)	July 17, 1992	Anticipation and obviousness
Miroslav Stanic	Surf’s Up – Things to see and do on the Internet, Issue #2, pp. 4-6 (“Surf’s Up Article”)	May 1995	Anticipation and obviousness
Michael Snoswell	Cyberterm system, (See, e.g., Snoswell Article; Surf’s Up Article)	Publicly known and/or used by 1992	Anticipation and obviousness
Kesmai (Kelton Flinn)	Air Warrior MANUAL.txt, Air Warrior Version 0.8, Preliminary Draft (“First Air Warrior Manual”)	1988	Anticipation and obviousness
Kesmai (Kelton Flinn)	Air Warrior Manual, Version 1.2 (“Second Air Warrior Manual”)	December 1989	Anticipation and obviousness
Kesmai	Super VGA Air Warrior Flight Manual (“SVGA AW Manual”) (See also SVGA Air Warrior game packaging)	1992	Anticipation and obviousness
Andrew Reese, Gregg Perlman	Online With Start - Kesmai Air Warrior, Start Magazine, Vol. 3, No. 2, Special Issue #4, p. 73 (“Start Magazine”)	1988	Anticipation and obviousness

Author or Inventor	Title or Patent Number of Prior Art	Date	Relevance
Video Games & Computer Entertainment	Worlds of Kesmai Article, Video Games & Computer Entertainment, pp. 75-76 (“Worlds of Kesmai”)	August 1989	Anticipation and obviousness
Jerry Michalski	Multi-User Virtual Environments, Part I, Release 1.0, Esther Dyson’s Monthly Report, (“Michalski Article”)	June 27, 1994	Anticipation and obviousness
Kesmai (Kelton Flinn)	Air Warrior Game (See, e.g., First Air Warrior Manual; Second Air Warrior Manual; SVGA AW Manual; SVGA Air Warrior game packaging; Start Magazine; Worlds of Kesmai; Michalski Article; Air Warrior Source Code and Executables)	Publicly known and/or used by 1986	Anticipation and obviousness
Thomas Funkhouser	RING: A Client-Server System for Multi-User Virtual Environments, 1995 IEEE Symposium on Interactive 3D Graphics, pp. 85-92 (April 9-12, 1995) (“Funkhouser Article”)	April 12, 1995	Anticipation and obviousness
Thomas Funkhouser, AT&T Bell Labs	Network Services for Multi-User Virtual Environments, IEEE Network Realities ‘95, Boston, MA (“Second Funkhouser Article”)	October 1995	Anticipation and obviousness
Rick Kazman	HIDRA: An Architecture for Highly Dynamic Physically Based Multi-Agent Simulations (“HIDRA Article”)	1993	Anticipation and obviousness
Michael Macedonia, Michael Zyda, David Pratt, Paul Barham, Steven Zeswitz	NPSNET: A Network Software Architecture for Large Scale Virtual Environments, Presence, Vol. 3, No. 4 (“NPSNET Article”)	Fall 1994	Anticipation and obviousness
Michael Macedonia	A Network Software Architecture for Large Scale Virtual Environments, Naval Postgraduate School (“Macedonia Dissertation”)	June 1995	Anticipation and obviousness

Author or Inventor	Title or Patent Number of Prior Art	Date	Relevance
David Pratt	A Software Architecture for the Construction and Management of Real-Time Virtual Worlds, Naval Postgraduate School (“Pratt Dissertation”)	June 1993	Anticipation and obviousness
Michael Macedonia, Michael Zyda, David Pratt, Paul Barham, Steven Zeswitz	NPSNET system (See, e.g., NPSNET Article; Macedonia Dissertation; Pratt Dissertation; Network Software Architectures for Real-Time Massively-Multiplayer Online Games, R. Delano, P. McFarlane (Feb. 2, 2005), pp. 64-68)	Publicly known and/or used by August 1993	Anticipation and obviousness
Brad Lineberger	Kingdom of Drakkar (See, e.g., Kingdom of Drakkar Source Code)	Publicly known and/or used by 1989	Anticipation and obviousness
Chip Morningstar, F. Randall Farmer	The Lessons of Lucasfilm’s Habitat (“Habitat A”)	1991	Anticipation and obviousness
Lucasfilm Ltd.	The Official Avatar Handbook: A Comprehensive Guide To Understanding Habitat (“Habitat B”)	1987	Anticipation and obviousness
Kathy Yakal	Habitat - A Look At The Future of Online Games, Compute!, Issue 77, p. 32 (“Habitat C”)	October 1986	Anticipation and obviousness
Chip Morningstar	The Ghu Guide, Lucasfilm Ltd. Games Division (“Habitat D”)	March 9, 1987	Anticipation and obviousness
Margaret Morabito	Enter The On-line World Of Lucasfilm, Margaret Morabito (“Habitat E”)	1986	Anticipation and obviousness
Quantum Comp. Tech.	Club Caribe Guidebook (“Habitat F”)	1989	Anticipation and obviousness
Kazutomo Fukuda, Tadayuki Tahara, Toru Miyoshi	Hypermedia Personal Computer Communication System: Fujitsu Habitat (“Habitat G”)	1990	Anticipation and obviousness

Author or Inventor	Title or Patent Number of Prior Art	Date	Relevance
Lucasfilms, F. Randall Farmer, Chip Morningstar	Habitat (<i>See, e.g.</i> , Habitat A-G; Habitat Source Code; Habitat Videos)	Publicly known and/or used by 1986	Anticipation and obviousness
Greg Thompson, Mark Horowitz, George Woltman	The MAZE game (“Maze War H”)	1976	Anticipation and obviousness
Callisto	Super Maze Wars Brochure (“Maze War I”)	1992	Anticipation and obviousness
MacroMind	Maze Wars+ Brochure (“Maze War J”)	1987 (upon information and belief)	Anticipation and obviousness
Oracle	Maze at INTEROP Brochure (“Maze War K”)	1992	Anticipation and obviousness
Oracle	Oracle at INTEROP 92 (“Maze War L”)	October 1992	Anticipation and obviousness
Greg Thompson et al.	Maze War (<i>See, e.g.</i> , Maze War A-O ³)	Publicly known	Anticipation and obviousness

³ Maze War A-G and M-O are as follows: Webpage found at <http://www.digibarn.com/collections/games/xerox-maze-war/index.html>, DigiBarn Computer Museum (Printed on 10/15/2009) (“Maze War A”); Webpage found at <http://www.digibarn.com/collections/games/maze-war/other-mazes/MazeWar-for-Alto.html>, DigiBarn Computer Museum (Printed on 10/15/2009) (“Maze War B”); Webpage found at <http://www.digibarn.com/history/04-VCF7-MazeWar/stories/colley.html>, DigiBarn Computer Museum (Printed on 10/15/2009) (“Maze War C”); Webpage found at <http://www.digibarn.com/history/04-VCF7-MazeWar/stories/guyton.html>, DigiBarn Computer Museum (Printed on 10/15/2009) (“Maze War D”); Webpage found at <http://www.digibarn.com/history/04-VCF7-MazeWar/stories/lebling.html>, DigiBarn Computer Museum (Printed on 10/15/2009) (“Maze War E”); Webpage found at <http://www.digibarn.com/history/04-VCF7-MazeWar/panelists.html>, DigiBarn Computer Museum (Printed on 10/15/2009) (“Maze War F”); The aMAzing History of Maze, Greg Thompson (2004) (“Maze War G”); Video of Maze War game in play on the Imlac PDS-1D hardware, found at <http://www.digibarn.com/collections/games/maze-war/imlacs-pds1-maze/movies/tom-uban-mazewar-demo-400.mov>, DigiBarn Computer Museum (Downloaded on 10/16/2009) (“Maze War M”); Video of Maze War game in play on Xerox Alto and 6085 hardware, found at <http://www.digibarn.com/collections/games/xerox-maze-war/movies/don-on-xerox-6085-maze.mov>, DigiBarn Computer Museum (Downloaded on 10/16/2009) (“Maze War N”); Video found at <http://www.digibarn.com/>

Author or Inventor	Title or Patent Number of Prior Art	Date	Relevance
		and/or used by 1975	
J. Calvin, A. Dickens, B. Gaines, P. Metzger, D. Miller, D. Owen	The SIMNET Virtual World Architecture, Virtual Reality Annual International Symposium, 1993 IEEE ("SIMNET Article")	1993	Anticipation and obviousness
Kevin Kelly	The First Online Sports Game, Wired ("Kelly Article")	December 1993	Anticipation and obviousness
Jonathan Shekter	The Netrek Newbie Manual, Rev. 1.3 ("Netrek Manual")	November 1995	Anticipation and obviousness
Kevin Smith, Scott Silvey	Netrek (<i>See, e.g.</i> , Declaration of Kevin Smith (Dec. 17, 2007) ("Smith Dec."); Declaration of Kevin Smith (Oct. 9, 2008) ("Second Smith Dec."); Declaration of Andrew T. McFadden (Oct. 13, 2008) ("McFadden Dec."); Declaration of Andrew T. McFadden (Oct. 21, 2008) ("Second McFadden Dec."); Kelly Article; Netrek Manual; Netrek Source Code)	Publicly known and/or used by 1991	Anticipation and obviousness
Matthew S. Fell	The Unofficial Doom Specs, Release v1.666 ("Doom Specs")	December 15, 1994	Obviousness
id Software	The Doom v1.2 Manual, readme.exe file ("Doom v1.2 Manual")	February 16, 1994	Obviousness
id Software	Doom (<i>See, e.g.</i> , Doom Specs; Doom v1.2 Manual; http://everything2.com/title/The+Doom+rendering+engine?display+type=printable ("Doom Rendering Engine"); http://doom.wikia.com/wiki/Doom_networking_component ("Doom Networking Component"); Doom Source Code and Executables)	Publicly known and/or used by February 1993	Obviousness

collections/games/xerox-maze-war/movies/maze-on-alto-fastart.mov, DigiBarn Computer Museum (Downloaded on 10/16/2009) ("Maze War O").

Author or Inventor	Title or Patent Number of Prior Art	Date	Relevance
Sierra On-line	Shadow of Yserbius Manual	1993	Anticipation and obviousness
Sierra On-line	Shadow of Yserbius (<i>See, e.g.</i> , Shadow of Yserbius Manual; Shadow of Yserbius and INN Executables)	Publicly known and/or used by 1992	Anticipation and obviousness
Bralick et al.	Using a Multi-User Dialogue System to Support Software Engineering Distance Education, 7th SEI CSEE Conference, SOFTWARE ENGINEERING EDUCATION, January 5-7, 1994 (“Bralick Article”)	January 1994	Anticipation and obviousness
James Aspnes	TinyMUD (<i>See, e.g.</i> , TinyMUD Source Code)	Publicly known and/or used by 1989	Anticipation and obviousness
	MUDs (<i>See, e.g.</i> , Declaration of John K. Bennett and exhibits (Oct. 28, 2008) (“Bennett Decl.”); Bralick Article; TinyMUD Source Code)	Publicly known and/or used by at least 1989	Anticipation and obviousness
MicroProse	CyberStrike: Intense multiplayer action in Cyberspace (Instruction Manual) (“CyberStrike A”)	1994	Anticipation and obviousness
MicroProse	CyberStrike: Technical Supplement (“CyberStrike B”)	1994	Anticipation and obviousness
Simutronics	CyberStrike (<i>See, e.g.</i> , CyberStrike A; CyberStrike B)	Publicly known and/or used by 1994	Anticipation and obviousness
Honda	U.S. Patent No. 6,020,885, titled Three-Dimensional Virtual Reality Space Sharing Method and System Using Local and Global Object Identification Codes, filed July 9, 1995 (“Honda patent”)	February 1, 2000 (issued)	Anticipation and obviousness

Author or Inventor	Title or Patent Number of Prior Art	Date	Relevance
Worlds, Inc.	Worlds Chat	Publicly known and/or used by July 1995	Anticipation and obviousness
Suzuki et al.	U.S. Patent No. 5,736,982, titled Virtual Space Apparatus With Avatars And Speech, filed August 1, 1995 (“Suzuki patent”)	April 7, 1998 (issued)	Obviousness
Nitta	U.S. Patent No. 5,347,306, titled Animated Electronic Meeting Place, filed December 17, 1993 (“Nitta patent”)	September 13, 1994 (issued)	Obviousness
Benford and Fahlén	A Spatial Model of Interaction In Large Virtual Environments, Proceedings of the Third European Conference on Computer-Supported Cooperative Work, September 13-17, 1993, Milan, Italy (“Benford Article”)	September 1993	Obviousness
Virtual Universe Corp.	The Parallel Universe From: info@virtual.cuc.ab.ca (Virtual Universe Product Information) Newsgroups: comp.groupware Subject: Multi-user, Real-time environments - New Product Date: Tue, 23 Aug 1994 18:58:49 GMT (“Virtual Univ. Newsgroup”)	August 23, 1994	Obviousness
Foley, Van Dam, Feiner & Hughes	Computer Graphics: Principles and Practice, 2d ed. (“Foley & Van Dam”)	1990	Obviousness
Shaun Bangay	Parallel Implementation Of A Virtual Reality System On A Transputer Architecture (“Bangay Dissertation”)	November 1993	Obviousness
Myers	U.S. Patent No. 5,490,239, titled Virtual Reality Imaging System, filed September 8, 1994 (“Myers patent”)	February 6, 1996 (issued)	Obviousness

Author or Inventor	Title or Patent Number of Prior Art	Date	Relevance
Bolas et al.	U.S. Patent No. 5,513,129, titled Method and System for Controlling Computer-Generated Virtual Environment in Response to Audio Signals, filed July 14, 1993 (“Bolas patent”)	April 30, 1996 (issued)	Obviousness
Maes et al.	U.S. Patent No. 5,563,988, titled Method and System for Facilitating Wireless, Full-Body, Real-Time User Interaction with a Digitally Represented Visual Environment, filed August 1, 1994 (“Maes patent”)	October 8, 1996 (issued)	Obviousness

1. Worlds Chat

On information and belief, the Worlds Chat system embodies one or more of the Asserted Claims. Activision has received limited information about Worlds Chat in response to interrogatories and has not yet received any documents from Worlds. Activision’s investigation into the features and functionality of Worlds Chat is ongoing. To the extent that Worlds Chat was publicly known or used more than one year prior to the effective filing date of the Original Patents-in-Suit, one or more of the Asserted Claims are anticipated and/or obvious in view of Worlds Chat.

2. The Asserted Claims of the Original Patents-in-Suit Are Obvious In View Of The Prior Art

The U.S. Supreme Court decision in *KSR Int’l Co. v. Teleflex Inc., et al.*, 127 S. Ct. 1727, 1739 (2007) held that a claimed invention can be obvious even if there is no explicit, written teaching, suggestion, or motivation for combining the prior art to produce that invention. In summary, *KSR* holds that patents that are based on new combinations of elements or components already known in a technical field may be found to be obvious. *See generally KSR*, 127 S. Ct. 1727. Specifically, the Court in *KSR* rejected a rigid application of the “teaching, suggestion, or

motivation [to combine]” test. *Id.* at 1741. “In determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls. What matters is the objective reach of the claim.” *Id.* at 1741-1742. “Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.* at 1742. In particular, in *KSR*, the Supreme Court emphasized the principle that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 1739. A key inquiry is whether the “improvement is more than the predictable use of prior art elements according to their established functions.” *Id.* at 1740.

In view of the Supreme Court’s *KSR* decision, the PTO issued a set of new Examination Guidelines. *See* Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in view of the Supreme Court Decision in *KSR International Co. v. Teleflex, Inc.*, 72 Fed. Reg. 57526 (October 10, 2007). Those Guidelines summarized the *KSR* decision, and identified various rationales for finding a claim obvious, including those based on other precedents. Those rationales include:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;

(D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;

(E) “Obvious to try” – choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

(F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;

(G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Id. at 57529.

Activision contends that one or more of these rationales apply in considering the obviousness of the Asserted Claims of the Original Patents-in-Suit. The claim charts in Exhibits A-D provide example sections within the prior art references that teach or suggest each and every element of the Asserted Claims of the Original Patents-in-Suit. To the extent that any elements of the Asserted Claims are not found in a particular reference, or to the extent that Worlds argues that any of the charted references does not disclose every element of an Asserted Claim, it would have been obvious to combine such reference with other references listed in Table 1 or with the knowledge of a person of ordinary skill in the art. Exemplary combinations and motivations to combine references for specific elements of the Asserted Claims of the Original Patents-in-Suit are set forth in Exhibit F.

A person of ordinary skill at the time of the alleged inventions of the Original Patents-in-Suit had reason to combine or modify the references listed in Table 1 in light of the knowledge

of a person of ordinary skill in the art at the time of the alleged inventions and information in the prior art cited herein. As a general matter, all of the references charted in Exhibits A-D relate to systems and methods that provide for the interaction of multiple users in a networked virtual environment. As such, they are all within the same field of art and would have been within the knowledge of a person of ordinary skill in the art. The motivation to combine these references is evident from the fact that they are each directed to the same field of technology and each address similar problems and propose similar solutions. Thus, a person of ordinary skill in the art at the time of filing of the Original Patents-in-Suit would be motivated to combine elements of any of these and similar references and recognize that the combination of any of these systems and methods is a predictable use of elements known in the art to solve a known problem and a use of known techniques to solve a known problem in the same way.

B. Claim Charts

Activision provides in Exhibits A-D and F claim charts comparing the references listed in Table 1 with the Asserted Claims of the Original Patents-in-Suit, setting forth example sections within the prior art that teach or suggest each and every element of the Asserted Claims of the Original Patents-in-Suit and explaining why, for each contention of obviousness, the prior art renders the Asserted Claim obvious. Activision's identification of specific portions of prior art references that disclose the elements of the Asserted Claims of the Original Patents-in-Suit is based, at least in part, on its present understanding of the Asserted Claims, its present understanding of Worlds' Preliminary Infringement Disclosure, its present understanding of the prior art, and/or its present understanding of the qualifications and skill level of one of ordinary skill in the art.

The claim charts of Exhibits A-D and F provide Activision's contentions about which claim elements are taught by or obvious in view of the prior art references. In this regard, they identify representative portions within the prior art references that disclose the elements of the Asserted Claims of the Original Patents-in-Suit. The cited portions are merely exemplary and do not necessarily reflect or include every portion of the prior art references that discloses or teaches particular claim terms or claim limitations. It should be recognized that a person of ordinary skill in the art would generally read a prior art reference as a whole and in the context of other publications, literature, and general knowledge in the field. To understand and interpret any specific statement or disclosure in a prior art reference, a person of ordinary skill in the art would rely upon other information including other publications and general scientific or engineering knowledge. In the future, if necessary, Activision might cite additional portions of the cited references to demonstrate and/or evidence the invalidity of the Asserted Claims of the Original Patents-in-Suit.

Where Activision identifies a particular figure in a prior art reference, the identification should be understood to encompass the caption and description of the figure as well as any text relating to the figure in addition to the figure itself. Similarly, where an identified portion of text refers to a figure or other material, the identification should be understood to include the referenced figure or other material as well.

C. Claim Construction

The Court has not yet construed the Asserted Claims. In the absence of a claim construction ruling, these contentions are made in the alternative and are not necessarily intended to be consistent with each other and other invalidity contentions herein. Activision reserves all rights to modify, amend, or supplement its Preliminary Invalidity Disclosure following the

Court's claim construction ruling, or upon Worlds' alteration/clarification of its asserted claim construction, or to the extent permitted by this Court.

Furthermore, Activision's Preliminary Invalidity Disclosure is based, at least in part, on Activision's present understanding of Worlds' Preliminary Infringement Disclosure. Worlds' Preliminary Infringement Disclosure contradicts the teaching of the Patents-in-Suit, contradicts the understanding of the claim terms by a person of ordinary skill in the art, and is vague and conclusory concerning how the claim limitations supposedly read on the accused products or activities. As a result, Activision is unable to discern Worlds' position regarding construction of numerous claim limitations. In addition, Activision may disagree with Worlds' interpretation of the meaning of many terms and phrases in the Asserted Claims.

Accordingly, Activision has provided this Preliminary Invalidity Disclosure based, in part, on its best understanding of Worlds' apparent constructions of the claims and Worlds' position concerning the scope and construction of those Asserted Claims, to the extent such positions can be deduced from Worlds' Preliminary Infringement Disclosure or other information. Activision's Preliminary Invalidity Disclosure does not represent Activision's agreement or view as to the meaning of any claim term contained therein. By including prior art that is anticipatory or renders obvious claims based on the construction apparently applied by Worlds to its claims, Activision's Invalidity Contentions are not – and should not be interpreted as – adoptions or admissions as to the accuracy of that scope or construction. Similarly, nothing herein shall be construed as an admission regarding the application of the Asserted Claims to any of Activision's accused products. Activision expressly reserves the right to propose alternative constructions to those advocated by Worlds, and to rebut Worlds' actual claim construction and infringement positions.

Unless otherwise stated herein, Activision takes no position on any matter of claim construction in this Preliminary Invalidity Disclosure. Activision expressly reserves the right to propose any claim construction it considers appropriate and to contest any claim construction it considers inappropriate. Activision also expressly reserves the right to argue that certain claim terms, phrases, and elements are indefinite, lack written description, are not enabled, are not patentable or are otherwise invalid under 35 U.S.C. § 101 or § 112.

D. Doctrine of Equivalents

Worlds has provided insufficient contentions regarding infringement under the doctrine of equivalents. Worlds has not provided detailed contentions that identify each specific claim limitation allegedly infringed under the doctrine of equivalents and its alleged equivalent element in the accused products, or the basis for Worlds' position regarding each such limitation and its alleged equivalent. Accordingly, Activision contends that Worlds should be precluded from asserting infringement under the doctrine of equivalents. If, however, Worlds provides additional information and is permitted to rely on the doctrine of equivalents, Activision reserves the right to amend and supplement these invalidity contentions as appropriate.

E. Other Grounds For Invalidity

Pursuant to the Joint Scheduling Statement ¶ 4.B, Activision contends that certain claims of the Original Patents-in-Suit are invalid under 35 U.S.C. § 112 because: (1) the claims lack adequate written description; (2) the claims are not enabled; and/or (3) the claims are indefinite. Activision's contentions that the following claims are invalid under 35 U.S.C. § 112 are made in the alternative and do not constitute, and should not be interpreted as, admissions regarding the construction or scope of the claims of the Original Patents-in-Suit, or that any of the claims of the Original Patents-in-Suit are not anticipated or rendered obvious by prior art.

1. Invalidity Under 35 U.S.C. § 112, ¶ 1

The following claims are invalid under § 112, first paragraph, because the specification does not contain a written description of the invention claimed, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same:

(a) ‘690 patent claims 1, 6, 10, 11 and 15, ‘558 patent claims 4 and 6, ‘856 patent claim 1, and the claims that depend from these independent claims, include the phrases “determining, from the received positions, a set of the other users’ avatars that are to be displayed to the first user,” “determining from the positions transmitted in step (c), by each client process, a set of the avatars that are to be displayed,” “determine from the received positions a set of the other users’ avatars that are to be displayed,” “determining from the positions received in step (c), by said each client process, avatars that are to be displayed to the user associated with said each client process,” and “determining, from the received positions, a set of the second avatars that are to be displayed to the first user.” These limitations are not disclosed expressly or inherently in the specification as viewed by one of ordinary skill in the art. Therefore, these claims fail to comply with the written description requirement of 35 U.S.C. § 112, first paragraph.

Moreover, nowhere in the specification do applicants disclose the details that would be needed to enable one of ordinary skill in the art to “determin[e], from the received positions, a set of the other users’ avatars that are to be displayed to the first user,” “determin[e] from the positions transmitted in step (c), by each client process, a set of the avatars that are to be displayed,” “determine from the received positions a set of the other users’ avatars that are to be

displayed,” “determin[e] from the positions received in step (c), by said each client process, avatars that are to be displayed to the user associated with said each client process,” or “determin[e], from the received positions, a set of the second avatars that are to be displayed to the first user” absent undue experimentation. Accordingly, ‘690 patent claims 1, 6, 10, 11, and 15, ‘558 patent claims 4 and 6, ‘856 patent claim 1, and the claims that depend from these independent claims, are also invalid under 35 U.S.C. § 112, first paragraph, because the specification fails to provide an enabling disclosure for the above claim elements.

(b) ‘690 patent claims 9, 18 and 20 include the phrase “determine from the positions a set of avatars that are to be displayed.” This limitation is not disclosed expressly or inherently in the specification as viewed by one of ordinary skill in the art. Therefore, these claims fail to comply with the written description requirement of 35 U.S.C. §112, first paragraph.

Moreover, nowhere in the specification do applicants disclose the details that would be needed to enable one of ordinary skill in the art to “determine from the positions a set of avatars that are to be displayed” absent undue experimentation. Accordingly, ‘690 patent claims 9, 18 and 20 are also invalid under 35 U.S.C. § 112, first paragraph, because the specification fails to provide an enabling disclosure for the above claim element.

(c) ‘501 patent claims 1, 12 and 14, and the claims that depend from these independent claims, include the phrases “determining, by the client device, a displayable set of the other user avatars associated with the client device display” and “determine a set of the other users’ avatars displayable on a screen associated with the client device.” These limitations are not disclosed expressly or inherently in the specification as viewed by one of ordinary skill in the art. Therefore, these claims fail to comply with the written description requirement of 35 U.S.C. § 112, first paragraph.

Moreover, nowhere in the specification do applicants disclose the details that would be needed to enable one of ordinary skill in the art to “determin[e], by the client device, a displayable set of the other user avatars associated with the client device display” or “determine a set of the other users’ avatars displayable on a screen associated with the client device” absent undue experimentation. Accordingly, ‘501 patent claims 1, 12 and 14, and the claims that depend from these independent claims, are also invalid under 35 U.S.C. § 112, first paragraph, because the specification fails to provide an enabling disclosure for the above claim elements.

(d) ‘690 patent claims 9, 18 and 20 include the phrases “synchronously disseminating less than all of the positions of the avatars not associated with a particular client process to each of the other client processes” and “synchronously disseminating the positions of less than all of the avatars not associated with a particular client process to each of the other client processes.” These limitations are not disclosed expressly or inherently in the specification as viewed by one of ordinary skill in the art. Therefore, these claims fail to comply with the written description requirement of 35 U.S.C. §112, first paragraph.

Moreover, nowhere in the specification do applicants disclose the details that would be needed to enable one of ordinary skill in the art to “synchronously disseminat[e] less than all of the positions of the avatars not associated with a particular client process to each of the other client processes” or “synchronously disseminat[e] the positions of less than all of the avatars not associated with a particular client process to each of the other client processes” absent undue experimentation. Accordingly, ‘690 claims 9, 18 and 20 are also invalid under 35 U.S.C. § 112, first paragraph, because the specification fails to provide an enabling disclosure for the above claim elements.

(e) ‘690 patent claims 4, 8, 13 and 16 and ‘558 patent claims 5 and 7 include the phrase “comparing the actual number to the maximum number to determine which of the . . . avatars are to be displayed.” This limitation is not disclosed expressly or inherently in the specification as viewed by one of ordinary skill in the art. Therefore, these claims fail to comply with the written description requirement of 35 U.S.C. §112, first paragraph.

Moreover, nowhere in the specification do applicants disclose the details that would be needed to enable one of ordinary skill in the art to “compar[e] the actual number to the maximum number to determine which of the . . . avatars are to be displayed” absent undue experimentation. Accordingly, ‘690 patent claims 4, 8, 13 and 16 and ‘558 patent claims 5 and 7 are also invalid under 35 U.S.C. § 112, first paragraph, because the specification fails to provide an enabling disclosure for the above claim element.

(f) ‘558 patent claims 1-3 include the phrase “means for communicating a position of a particular user object corresponding to a particular user in the three-dimensional, computer-generated graphical space from the particular user’s client process to the other client processes via the central server process, the means for communicating programmed according to a protocol.” This limitation is not disclosed expressly or inherently in the specification as viewed by one of ordinary skill in the art. Therefore, these claims fail to comply with the written description requirement of 35 U.S.C. §112, first paragraph.

Moreover, nowhere in the specification do applicants disclose the details that would be needed to enable one of ordinary skill in the art to implement a “means for communicating a position of a particular user object corresponding to a particular user in the three-dimensional, computer-generated graphical space from the particular user’s client process to the other client processes via the central server process, the means for communicating programmed according to

a protocol” absent undue experimentation. Accordingly, ‘558 patent claims 1-3 are also invalid under 35 U.S.C. § 112, first paragraph, because the specification fails to provide an enabling disclosure for the above claim element.

(g) ‘558 patent claims 1-3 include the phrase “means, on a digital computer executing the particular user’s client process, for receiving positions of the user objects of the other client processes according to the protocol via the central server process.” This limitation is not disclosed expressly or inherently in the specification as viewed by one of ordinary skill in the art. Therefore, these claims fail to comply with the written description requirement of 35 U.S.C. §112, first paragraph.

Moreover, nowhere in the specification do applicants disclose the details that would be needed to enable one of ordinary skill in the art to implement a “means, on a digital computer executing the particular user’s client process, for receiving positions of the user objects of the other client processes according to the protocol via the central server process” absent undue experimentation. Accordingly, ‘558 patent claims 1-3 are also invalid under 35 U.S.C. § 112, first paragraph, because the specification fails to provide an enabling disclosure for the above claim element.

(h) ‘558 patent claims 1-3 include the phrase “means, on the digital computer executing the particular user’s client process, for rendering a three-dimensional view from a viewpoint of the location of the particular user object, the rendered view including at least one object from the environment database and, when other user objects are at locations viewable from the rendered viewpoint, including those other viewable user objects.” This limitation is not disclosed expressly or inherently in the specification as viewed by one of ordinary skill in the art.

Therefore, these claims fail to comply with the written description requirement of 35 U.S.C. §112, first paragraph.

Moreover, nowhere in the specification do applicants disclose the details that would be needed to enable one of ordinary skill in the art to implement a “means, on the digital computer executing the particular user’s client process, for rendering a three-dimensional view from a viewpoint of the location of the particular user object, the rendered view including at least one object from the environment database and, when other user objects are at locations viewable from the rendered viewpoint, including those other viewable user objects” absent undue experimentation. Accordingly, ‘558 patent claims 1-3 are also invalid under 35 U.S.C. § 112, first paragraph, because the specification fails to provide an enabling disclosure for the above claim element.

(i) ‘558 patent claims 1-3 include the phrases “position of a particular user object,” “positions of the user objects,” “viewpoint of the location of the particular user object,” “when other user objects are at locations viewable from the rendered viewpoint” and “viewable user objects.” These limitations are not disclosed expressly or inherently in the specification as viewed by one of ordinary skill in the art. Therefore, these claims fail to comply with the written description requirement of 35 U.S.C. § 112, first paragraph.

Moreover, nowhere in the specification do applicants disclose the details that would be needed to enable one of ordinary skill in the art to implement “position of a particular user object,” “positions of the user objects,” “viewpoint of the location of the particular user object,” “when other user objects are at locations viewable from the rendered viewpoint” or “viewable user objects” absent undue experimentation. Accordingly, ‘558 patent claims 1-3 are also

invalid under 35 U.S.C. § 112, first paragraph, because the specification fails to provide an enabling disclosure for the above claim elements.

(j) ‘501 patent claims 1, 12 and 14, and the claims that depend from these independent claims, include the phrase “fail to satisfy a participant condition imposed on avatars displayable on a . . . display of the client device.” This limitation is not disclosed expressly or inherently in the specification as viewed by one of ordinary skill in the art. Therefore, these claims fail to comply with the written description requirement of 35 U.S.C. §112, first paragraph.

Moreover, nowhere in the specification do applicants disclose the details that would be needed to enable one of ordinary skill in the art to implement “fail to satisfy a participant condition imposed on avatars displayable on a . . . display of the client device” absent undue experimentation. Accordingly, ‘501 patent claims 1, 12 and 14, and the claims that depend from these independent claims, are also invalid under 35 U.S.C. § 112, first paragraph, because the specification fails to provide an enabling disclosure for the above claim element.

(k) ‘501 patent claims 1, 12 and 14, and the claims that depend from these independent claims, include the phrases “customizing, using a processor of a client device, an avatar in response to input by the first user” and “create a custom avatar in response to input by the first user.” These limitations are not disclosed expressly or inherently in the specification as viewed by one of ordinary skill in the art. Therefore, these claims fail to comply with the written description requirement of 35 U.S.C. §112, first paragraph.

Moreover, nowhere in the specification do applicants disclose the details that would be needed to enable one of ordinary skill in the art to “customiz[e], using a processor of a client device, an avatar in response to input by the first user” or “create a custom avatar in response to input by the first user” absent undue experimentation. Accordingly, ‘501 patent claims 1, 12 and

14, and the claims that depend from these independent claims, are also invalid under 35 U.S.C. § 112, first paragraph, because the specification fails to provide an enabling disclosure for the above claim elements.

(l) ‘501 patent claims 1, 12 and 14, and the claims that depend from these independent claims, include the phrase “a three dimensional avatar.” This limitation is not disclosed expressly or inherently in the specification as viewed by one of ordinary skill in the art. Therefore, these claims fail to comply with the written description requirement of 35 U.S.C. §112, first paragraph.

Moreover, nowhere in the specification do applicants disclose the details that would be needed to enable one of ordinary skill in the art to implement “a three dimensional avatar” absent undue experimentation. Accordingly, ‘501 patent claims 1, 12 and 14, and the claims that depend from these independent claims, are also invalid under 35 U.S.C. § 112, first paragraph, because the specification fails to provide an enabling disclosure for the above claim element.

2. Invalidity Under 35 U.S.C. § 112, ¶ 2

The following claims are invalid under § 112, second paragraph, for failure to particularly point out and distinctly claim the subject matter which the applicants regarded as their alleged inventions:

(a) ‘690 patent claims 1, 6, 10, 11 and 15, ‘558 patent claims 4 and 6, ‘856 patent claim 1, and the claims that depend from these independent claims, include the phrases “determining, from the received positions, a set of the other users’ avatars that are to be displayed to the first user,” “determining from the positions transmitted in step (c), by each client process, a set of the avatars that are to be displayed,” “determine from the received positions a set of the other users’ avatars that are to be displayed,” “determining from the positions received

in step (c), by said each client process, avatars that are to be displayed to the user associated with said each client process,” and “determining, from the received positions, a set of the second avatars that are to be displayed to the first user.” These phrases do not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and do not apprise a person of ordinary skill in the art of its scope. Thus, all claims which include these phrases are in violation of 35 U.S.C. §112 ¶ 2.

(b) ‘690 patent claims 9, 18 and 20 include the phrase “determine from the positions a set of avatars that are to be displayed.” This phrase does not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and does not apprise a person of ordinary skill in the art of its scope. Thus, all claims which include this phrase are in violation of 35 U.S.C. §112 ¶ 2.

(c) ‘501 patent claims 1, 12 and 14, and the claims that depend from these independent claims, include the phrases “determining, by the client device, a displayable set of the other user avatars associated with the client device display” and “determine a set of the other users’ avatars displayable on a screen associated with the client device.” These phrases do not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and do not apprise a person of ordinary skill in the art of its scope. Thus, all claims which include these phrases are in violation of 35 U.S.C. §112 ¶ 2.

(d) ‘690 patent claims 9, 18 and 20 include the phrases “synchronously disseminating less than all of the positions of the avatars not associated with a particular client process” and “synchronously disseminating the positions of less than all of the avatars not associated with a particular client process to each of the other client processes.” These phrases do not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and do not

apprise a person of ordinary skill in the art of its scope. Thus, all claims which include these phrases are in violation of 35 U.S.C. §112 ¶ 2.

(e) ‘690 patent claims 4, 8, 13 and 16 and ‘558 patent claims 5 and 7 include the phrase “comparing the actual number to the maximum number to determine which of the . . . avatars are to be displayed.” This phrase does not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and does not apprise a person of ordinary skill in the art of its scope. Thus, all claims which include this phrase are in violation of 35 U.S.C. §112 ¶ 2.

(f) ‘690 patent claims 2 and 12 include the phrase “displaying the set of the other users’ avatars from based on the orientation of the first user’s avatar.” This phrase does not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and does not apprise a person of ordinary skill in the art of its scope. Thus, all claims which include this phrase are in violation of 35 U.S.C. §112 ¶ 2.

(g) ‘558 patent claims 1-3 include the phrase “means for communicating a position of a particular user object corresponding to a particular user in the three-dimensional, computer-generated graphical space from the particular user’s client process to the other client processes via the central server process, the means for communicating programmed according to a protocol.” This phrase does not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and does not apprise a person of ordinary skill in the art of its scope. Thus, all claims which include this phrase are in violation of 35 U.S.C. §112 ¶ 2.

(h) ‘558 patent claims 1-3 include the phrase “means, on a digital computer executing the particular user’s client process, for receiving positions of the user objects of the other client processes according to the protocol via the central server process.” This phrase does not

particularly and distinctly claim subject matter that the patent applicants regard as their invention, and does not apprise a person of ordinary skill in the art of its scope. Thus, all claims which include this phrase are in violation of 35 U.S.C. §112 ¶ 2.

(i) ‘558 claims 1-3 include the phrase “means, on the digital computer executing the particular user’s client process, for rendering a three-dimensional view from a viewpoint of the location of the particular user object, the rendered view including at least one object from the environment database and, when other user objects are at locations viewable from the rendered viewpoint, including those other viewable user objects.” This phrase does not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and does not apprise a person of ordinary skill in the art of its scope. Thus, all claims which include this phrase are in violation of 35 U.S.C. §112 ¶ 2.

(j) ‘558 claims 1-3 include the phrases “position of a particular user object,” “positions of the user objects,” “viewpoint of the location of the particular user object,” “when other user objects are at locations viewable from the rendered viewpoint” and “viewable user objects.” These phrases do not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and do not apprise a person of ordinary skill in the art of its scope. Thus, all claims which include these phrases are in violation of 35 U.S.C. §112 ¶ 2.

(k) ‘558 patent claim 3 includes the phrase “the environment data.” This phrase has no antecedent basis and does not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and does not apprise a person of ordinary skill in the art of its scope. Thus, claim 3 is in violation of 35 U.S.C. §112 ¶ 2.

(l) ‘501 patent claims 1, 12 and 14, and the claims that depend from these independent claims, include the phrase “fail to satisfy a participant condition imposed on avatars

displayable on a . . . display of the client device.” This phrase does not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and does not apprise a person of ordinary skill in the art of its scope. Thus, all claims which include this phrase are in violation of 35 U.S.C. §112 ¶ 2.

(m) ‘501 patent claims 1, 12 and 14, and the claims that depend from these independent claims, include the phrases “customizing, using a processor of a client device, an avatar in response to input by the first user” and “create a custom avatar in response to input by the first user.” These phrases do not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and do not apprise a person of ordinary skill in the art of its scope. Thus, all claims which include these phrases are in violation of 35 U.S.C. §112 ¶ 2.

(n) ‘501 patent claims 1, 12 and 14, and the claims that depend from these independent claims, include the phrase “a three dimensional avatar.” This phrase does not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and does not apprise a person of ordinary skill in the art of its scope. Thus, all claims which include this phrase are in violation of 35 U.S.C. §112 ¶ 2.

(o) Claim 16 of the ‘501 patent includes the phrase “the method.” This phrase has no antecedent basis and does not particularly and distinctly claim subject matter that the patent applicants regard as their invention, and does not apprise a person of ordinary skill in the art of its scope. Thus, claim 16 is in violation of 35 U.S.C. §112 ¶ 2.

3. Invalidity Under 35 U.S.C. § 112, ¶ 6

Claims 1-3 of the ‘558 patent are invalid under § 112, sixth paragraph, because the specification fails to disclose structure corresponding to the following means-plus-function elements:

- “means for communicating a position of a particular user object corresponding to a particular user in the three-dimensional, computer-generated graphical space from the particular user’s client process to the other client processes via the central server process, the means for communicating programmed according to a protocol”;
- “means, on a digital computer executing the particular user’s client process, for receiving positions of the user objects of the other client processes according to the protocol via the central server process”; and
- “means, on the digital computer executing the particular user’s client process, for rendering a three-dimensional view from a viewpoint of the location of the particular user object, the rendered view including at least one object from the environment database and, when other user objects are at locations viewable from the rendered viewpoint, including those other viewable user objects.”

III. DOCUMENT PRODUCTION

Concurrently with these contentions, Activision is producing or making available for inspection all prior art identified pursuant to the Joint Scheduling Statement ¶ 4.B. The production numbers for this prior art are found within the following ranges of documents: ACTV0000001 – ACTV0002478.

IV. ONGOING DISCOVERY AND DISCLOSURES

Discovery and Activision’s investigation, including Activision’s search for prior art, is ongoing. Activision might further supplement, amend, or alter the positions taken and information disclosed in this Preliminary Invalidity Disclosure including, without limitation, the prior art and grounds of invalidity set forth herein, to take into account information or defenses that may come to light as a result of these continuing efforts. Activision hereby incorporates by

reference the testimony of any fact witnesses that are deposed, that provide declarations, or that otherwise testify in this lawsuit. Activision also hereby incorporates by reference the reports and testimony of Activision's expert witnesses regarding invalidity of the Patents-in-Suit.

For certain items of prior art, Activision is seeking discovery from third parties, as appropriate. Activision is also seeking discovery from Worlds including, e.g., discovery regarding conception and reduction to practice, commercial embodiments, etc. Activision, therefore, may supplement or amend this Preliminary Invalidity Disclosure if and when further information becomes available.

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CERTIFICATE OF SERVICE

I hereby certify that the foregoing document filed through the ECF system will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NEF) this 3rd day of December, 2012.

By: /s/ Blake B. Greene
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